

SCARA Robot

IR-S7 Series

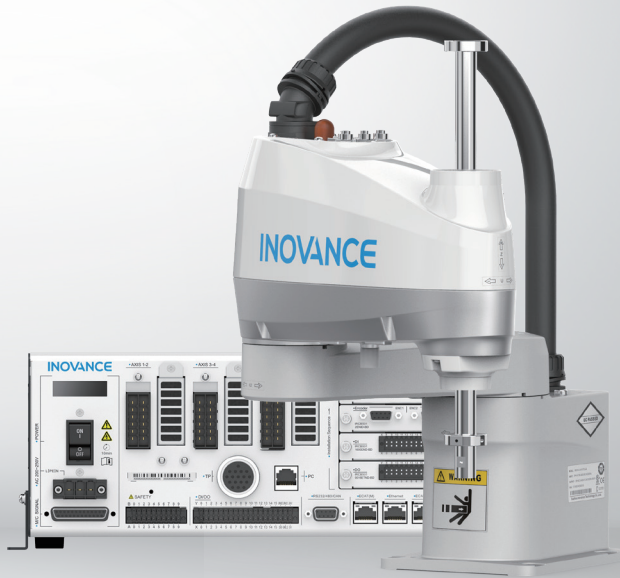
Robots with enhanced load capacity and multiple arm length options, suitable for large load applications in various industries.

Scope of Application

Assembly and dispensing in 3C industry, lithium battery industry, photovoltaic industry, and display industry.

Features

Load	7 Kg
Arm length	500 mm / 600 mm / 700 mm
Efficiency	0.351s/0.36s/0.375s
Repeatability	J1 and J2: ±0.02 mm; J3: 0.01 mm; J4: ±0.01°



Technical Data

Model		IR-S7-50Z20S3-INT	IR-S7-60Z20S3-INT	IR-S7-70Z20S3-INT
Arm length	Arm 1 + Arm 2	500 mm	600 mm	700 mm
	Arm 1	225 mm	325 mm	425 mm
	Arm 2	275 mm	275 mm	275 mm
Maximum speed	J1 + J2	7120 mm/s	7850 mm/s	8590 mm/s
	J3	1600 mm/s	1600 mm/s	1600 mm/s
	J4	2000° /s	2000° /s	2000° /s
	J1 + J2	±0.02 mm	±0.02 mm	±0.02 mm
Repeatability	J3	±0.01 mm	±0.01 mm	±0.01 mm
	J4	±0.01°	±0.01°	±0.01°
	Rated	3 Kg	3 Kg	3 Kg
	Maximum	7 Kg	7 Kg	7 Kg
Allowable inertia moment of J4	Rated	0.01 Kg.m ²	0.01 Kg.m ²	0.01 Kg.m ²
	Maximum	0.12 Kg.m ²	0.12 Kg.m ²	0.12 Kg.m ²
Mounting hole		150x150 mm (4-Ø9 mm)		
Weight (excluding cables)		17Kg	17.5Kg	19Kg
Press-in force of J3		150 N		
Customer signal line		15 (15pin: D-sub) CAT5E		
Customer air piping		Ø6 mm x 2, 0.59 Mpa Ø4 mm x 1, 0.59 Mpa		
Operating conditions	Ambient temperature ^[1]	5~40° C (no excessive temperature changes)		
	Relative humidity	10~80%		
Noise level ^[2]		Laeq=70 dB(A)		
Maximum motion range	J1	±132°		
	J2	±150°		
	J3	200 mm		
	J4	±360°		
Cycle time ^[3]		0.351s	0.36s	0.375s
Certification		CE,cSGSUS,KCs,Kc		

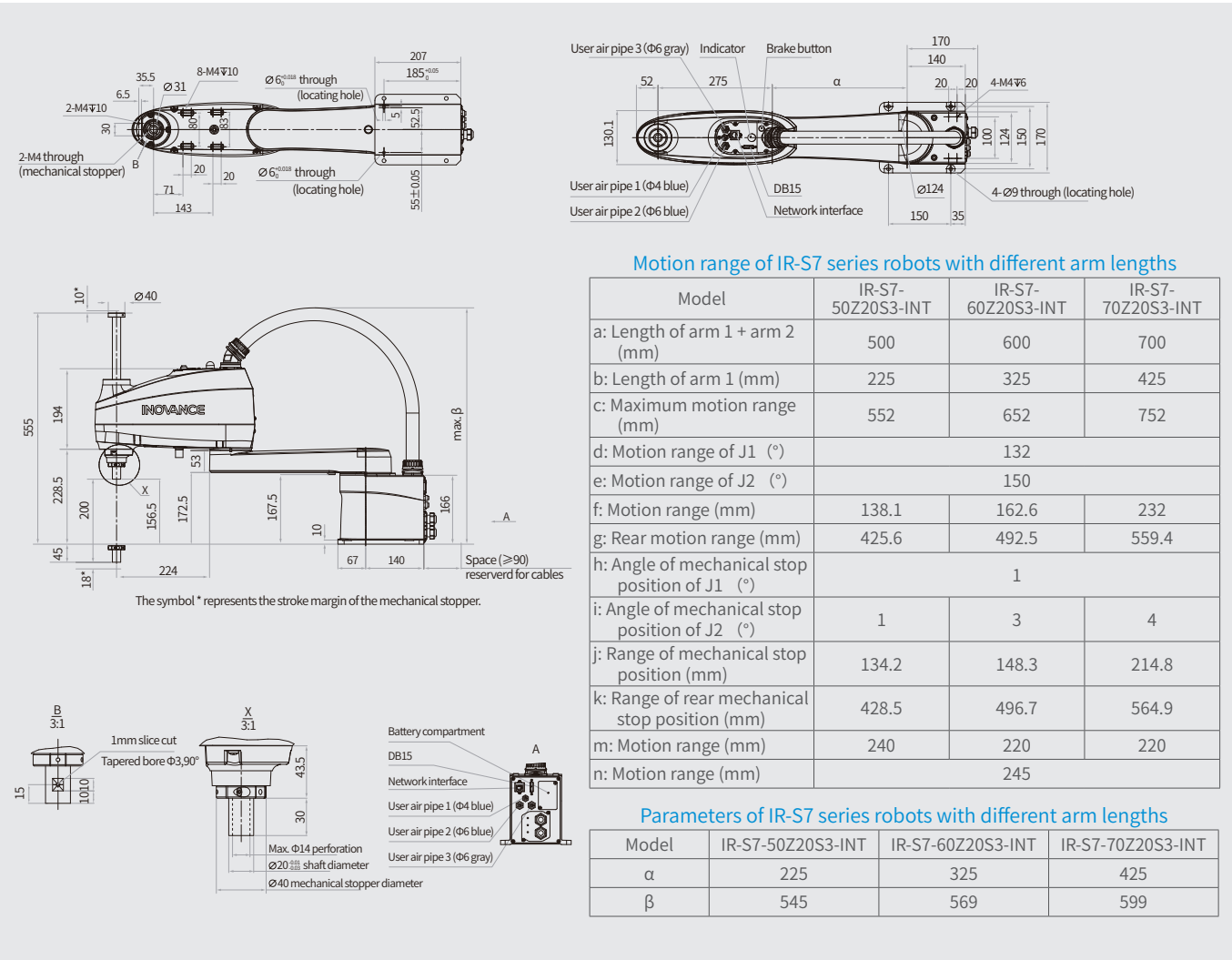
Note

[1]When used in a low-temperature environment approximating the lowest allowable temperature, or when idle for a longperiod of time due to holi-days and nighttime, it is recommended to warm up the product for 10 minhutes before operating it.

[2] Measured in front of the robot at a distance of 1000 mm from its operating area and at least 50 mm above the base mounting surface with four joints operating at 100% speed and acceleration, with a duty cycle of 50%.

[3]Time required for a 7 Kg/10 Kg SCARA robot to move a 2 Kg payload between two points 300 mm apart at a height of 25 mm.

Mounting Dimensions(mm)



Motion Range(mm)

